

REMARKS

Applicant submits this Amendment and Response in reply to the Official Action dated November 13, 2008. Applicant submits that the Amendment and Response is fully responsive to the Official Action for at least the reasons set forth herein.

At the onset, Applicant notes that claims 1 and 7 have been amended herewith. Specifically, claim 1 has been amended to recite, *inter alia*, that each of said first and second receivers are operable with a dedicated antenna, both of said first and second receivers being connected to a correlator. Additionally, the claim has been amended to clarify that the first receiver is at a first location and the second receiver is at a location separate from the first location. Claim 7 has been similarly amended. For example, claim 7 has been amended to recite, *inter alia*, a base station, a first receiver and a second receiver within a reception zone of the base station, the first and second receivers each being associated with an antenna and both being associated with a correlator, said first receiver at a first location configured to receive a first plurality of signals from the base station on the mobile telecommunications network, said first receiver having a good quality communications link with the base station said second receiver at a second location separate from the first location configured to receive a second plurality of signals from the base station.

No new matter has been added to the application by way of the aforementioned amendments. For example, Applicant directs the Examiner's attention to Figure 1 and its corresponding description. Applicant notes that the identified sections are only presented for convenience of the Examiner and should not be taken as an exhaustive list of support for the claim limitations.

Applicant submits that the present invention is patentable over any of the references cited in the Official Action, whether taken alone or in any hypothetical combination.

In the Official Action, claims 1, 5, 7, and 11 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Kwon et al., U.S. Patent No. 7,359,431 (hereinafter “Kwon”) in view of Bousquet et al., U.S. Patent No. 6,650,906 (hereinafter “Bousquet”). Claims 2-4, 6, 8-10 and 12 were rejected 35 U.S.C. § 103(a) as being unpatentable over Kwon in view of Bousquet in further view of Anderson (previously cited).

Applicant submits that the cited references describe and teach a fundamentally different method and system.

Notably, the claimed invention is directed to, *inter alia*, first and second receivers located at different locations. For example, in a disclosed embodiment, the first receiver is positioned in a cell so as to have a direct line of sight with the base station, e.g., having a good quality communications link with the base station. The second receiver is positioned in a place, separate from the first location and where reception is characterized in terms of propagation delay, frequency shift, amplitude and phase relative to the first receiver signal and the difference in characteristics from a sample signal is accounted for.

The claimed invention compensates for changes in the signal propagation due to environmental conditions. In order to overcome these effects, it is useful to determine the propagation characteristics of a cell within a mobile telecommunications network so that compensation can be made for the specific environment of each cell in the network, for example, to enhance the signal-to-noise (S/N) ratio within that cell.

The determination of the propagation characteristic of the cell is made using the first and second receivers in different locations. The present invention relies on correlation being made in both time and frequency domains between a plurality of signals received at a first and a second receiver from the same base station.

In stark contrast, the cited references fail to teach two receivers that are separated from each other and correlating signals from the first and second receivers.

At best, Kwon teaches correlating signals in the same receiver. For example, Kwon employs a correlation apparatus wherein a received signal is compared with a reference signal in a correlation unit. The signals are processed in a first estimating unit and subsequently processed in a second estimating unit.

The correlation unit obtains a correlation function of a first received signal by correlating a received synchronizing signal and a reference synchronizing signal. The synchronizing signal, which is reserved in advance into user data, is used for synchronization and equalization purposes.

The method and system described in Kwon is used to synchronize one transmitter with one receiver. “A PN sequence is described as an example of a synchronizing signal for estimating a channel, between transmitter and receiver.” Col. 4, lines 31-33. “The correlation unit 411 obtains a correlation function of a received signal by means of correlation between a PN sequence received via the channel, which is a received signal, and a PN sequence generated by a system, which is a reference signal.” *Id.* at lines 33-37.

Both Kwon and Bousquet teach a reference signal which is employed or used at the same location as the signal receiver. Bousquet teaches a feedback management system wherein the power is measured at locations with the base station. A reference signal transmitter (co-located) with a traffic transmitter transmits a reference signal to the reference signal receiver (co-located) with a traffic receiver. Each receiver comprises a reference signal receiving means and a traffic receiver means. The transmission power is varied with respect to the reference signal.

Pro arguendo, even if the Examiner's asserts that the reference signal of the cited art is either the first or second plurality of signals, the reference signal is received by the same receiver as the other signal. Accordingly, none of the cited references teach at least the claimed correlation or the claimed first and second receiver.

Additionally, since the cited prior art reference is not comparing or correlating signals received by two separate receivers to determine propagation characteristics, there is no need to have the first receiver have a good quality link, e.g., line of sight with the base station.

Furthermore, there is no motivation to combine the references. Notably, the Official Action does not even mention any motivation. Applicant submits that one of ordinary skill in the art would not combine the references. There is no reason for such combination. Kwon uses a correlator and correlation, Bousquet does not.

Therefore, Applicant submits that the combination is improper. *Pro arguendo*, even if the combination is proper, the combination does not teach or suggest each and every limitation of

the claims. The claimed invention allows an accurate signal representation to be made. The prior art cannot achieve this feature. Additionally, Applicant notes that the prior art uses reference signals. Predetermined reference signals are not representative of real signals transmitted over time.

Accordingly, Applicant submit that claims 1, 5, 7 and 11 are patentable over Kwon and Bousquet. Applicant further submits that Anderson fails to cure the above-identified deficiencies. Anderson does not disclose correlating the enhanced second plurality of signals with the first plurality of signals to produce an enhanced correlation, as claimed.

Applicant submits that claims 2-4, 6, 8-10 and 12 are patentable over the cited references based at least upon the above-identified analysis. Applicant further submits that the combination of Anderson with Kwon and Bousquet is also improper. Notably, Applicant asserts that there is no motivation to combine the references. Additionally, Anderson's recursive analysis is performed by recursively requesting additional data from the SCS antennas on the base station. *See* Anderson, paragraph 245. This repeated acquisition of data is not the same as processing the enhanced second signals with the first signals.

Based upon the foregoing, Applicant respectfully requests withdrawal of the rejections pursuant to 35 U.S.C. § 103(a).

In view of the above, it is respectfully submitted that all of the claims in the application contain patentable subject matter and a Notice of Allowance is respectfully solicited. If the

Examiner has any reservation in allowing the claims, and believes a telephone interview would advance prosecution, he is kindly requested to telephone the undersigned at his earliest convenience.

Respectfully Submitted,

A handwritten signature in cursive script, appearing to read "Seth Weinfeld".

Seth Weinfeld

Registration No.: 50,929

Scully, Scott, Murphy & Presser, P.C.
400 Garden City Plaza – Suite 300
Garden City, New York 11530
(516)742-4343
SW:reg